Developing Airmen and Guardians with Games for Enhanced Readiness (DAGGER)

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WHAT’S THE PROBLEM?
We lose resources from human error!

• Twelve (12) accidents in 2020.
• Eleven (11) significantly caused by human factors.

• Many of those human factors correspond to Airman Leadership Qualities & AF Foundational Competencies.

• $365,192,023 destroyed/lost assets.
• Six (6) fatalities.
SPORTS OR ONLINE GAMES
ALL GAMES

LEARNING GAMES

SIMULATIONS
WHY **GAMES**?

Relevant, immersive, FUN, and transferable!
Imagine if we could develop skills through commercial off the shelf games

- Low cost
- Engaging
- High Knowledge Retention
- Effective

We want airmen and guardians to learn and fail in the game rather than real life
## Workforce Competencies

### Table 1: Twelve Digital Competencies Needed by a Digital Workforce

<table>
<thead>
<tr>
<th>Competency</th>
<th>Description</th>
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<tbody>
<tr>
<td>1. Accountability</td>
<td>Desire to identify expectations and meet obligations</td>
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<td>2. Adaptability</td>
<td>Willingness to deviate from the norm as situations change or emerge</td>
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<td>3. Business Acumen</td>
<td>Understanding of business issues, including business operations, business</td>
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<td>strategy, economies and changing technology</td>
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<td>4. Collaboration/Teamwork</td>
<td>Orientation toward the interests of the team and a willingness to work with</td>
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<td>others to make decisions and achieve goals</td>
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<td>5. Conceptual Thinking</td>
<td>Ability to identify and apply models, frameworks and patterns to new</td>
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<tr>
<td></td>
<td>situations</td>
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<td>6. Decisiveness</td>
<td>Adept at understanding the scope of an issue, identifying needed</td>
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<td>information and selecting a choice in a timely manner</td>
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<td>7. Digital Literacy</td>
<td>Skill at using a variety of technologies to collect, synthesize and apply</td>
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<td></td>
<td>knowledge</td>
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<tr>
<td>8. Global Mindset</td>
<td>Recognition of the differences across cultures; appreciation of diversity</td>
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<td></td>
<td>among cultures</td>
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<td>9. Innovation</td>
<td>Realization of opportunities to improve performance through alterations to</td>
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<td></td>
<td>methods, processes, products and services</td>
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<td>10. Openness to Learning</td>
<td>Willingness to continually improve one’s knowledge, skills and abilities</td>
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<td>through work assignments and experiences with others</td>
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<td>11. Results Orientation</td>
<td>Ability to set goals and achieve them</td>
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<td>12. Risk Taking</td>
<td>Ability to handle ambiguity and make calculated choices when faced with</td>
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<tr>
<td></td>
<td>uncertainty</td>
</tr>
</tbody>
</table>
THE VIDEO GAME PLAYER COMMUNITY

The video game community is vast and diverse. Two thirds of Americans—people of all ages, races, genders and backgrounds—play video games. Video game players are about as likely to be female as male, and the majority of players are over 18.

66% of Americans play video games at least weekly.

65% of American adults (age 18+) play video games.

71% of American kids (under 18) play video games.

87% believe there is a video game for everyone.

There are 215.5 million active video game players across all ages in the U.S.

VIDEO GAME PLAYERS ACROSS ALL AGES:

48% identify as female
52% identify as male

48% of men and boys play video games
70% of women and girls play video games

* Throughout this report, “video game players” are those that play video games at least an hour a week.

† Among respondents (6%), 0.97% chose “Other” or “prefer not to answer.”
CURRENT WAY OF TEACHING
CURRENT WAY OF TEACHING
On the field of friendly strife are sown the seeds that on other days, and other fields will bear the fruits of victory.

/// GENERAL DOUGLAS MACARTHUR
**THE Research Design**

**Baseline Assessment**
- Participant teams assessed on competencies
  - Communication
  - Problem-Solving
  - Teamwork

** Condition Applied**
- Groups receive treatments 2-3 hours/wk for 30 days
  - Control: lectures on competencies
  - Study: facilitated through commercial-off-the-shelf online games

**SEPTEMBER 2022**
- Further develop and refine scenarios
  - Educate leaders and educators on effectiveness on game-based learning
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Scan to email and join us

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